1

Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

Complete	if Known
Application Number	10/572,525
Filing Date	October 26, 2007
First Named Inventor:	Xuejun Kang
Art Unit	2823
Examiner Name	Nguyen, Khiem D.
Attorney Docket Number	7989P002

	U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Numi	Document Number Der-Kind Code ² (If known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
		US-	4,107,720	8/15/1978	Pucel et al.				
		US-	5,192,987	3/9/1993	Khan et al.				
		US-	5,405,804	4/11/1995	Yabe				
		US-	6,091,085	7/18/2000	Lester				
		US-	6,169,297	1/2/2001	Jang et al.				
		US-	6,307,218	10/23/2001	Steigerwald et al.				
		US-	6,365,429	4/2/2002	Kneissl, et al.				
		US-	6,420,242	7/16/2002	Cheung et al.				
		US-	6,420,732	7/16/2002	Kung et al.				
		US-	6,492,661	12/10/2002	Chien et al.				
		US-	6,573,537	6/3/2003	Steigerwald et al.				
		US-	6,821,804	11/23/2004	Thibeault et al.				
		US-	7,338,822	3/4/2008	Wu et al.				
		US-	2002/0022286 A1	2/21/2002	Nikolaev et al.				
		US-	2002/0034835 A1	3/21/2002	Chen et al.				

5

		F	OREIGN PATEN	T DOCUMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		(if known) CN 1373522 A EP 1 061 590 A1	10/9/2002 12/20/2000	Quanxin Photoelectric Science Shin-Etsu Handotai Co., Ltd.		*
		EP 1 139 409 A2	10/4/2001	Agere Systems Guardian Corporation		
		JP 2001-036129 JP 2001-168387	2/9/2001 6/22/2001	Dowa Mining Co. Toyoda Gosei KK		*
		JP 2001-237461	8/31/2001	Tokyo Shibaura Electric Co.		*
		JP 2005-236048 JP 2006-253647	9/2/2005 9/21/2006	Shin-Etsu Handotai KK Rohm Co. Ltd.		*
		JP 10-117016 KR 10-2002-079659	5/6/1998 10/19/2002	Nichia Chem Ind. Ltd. Epivalley Co. Ltd.		*

* only Abstract in English

Examiner	Date Considered	
Signature		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. 5Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if

possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. The public way dependent and the first process is a submitting the complete including gathering, preparing, and submitting the complete including gathering. submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

2

Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

Complete	if Known	
Application Number	10/572,525	
Filing Date	October 26, 2007	
First Named Inventor:	Xuejun Kang	
Art Unit	2823	
Examiner Name	Nguyen, Khiem D.	
Attornev Docket Number	7989P002	

	U.S. PATENT DOCUMENTS									
Examiner Initials*	Cite No. ¹	Numi	Document Number Der-Kind Code ² (If known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
		US-	2002/0093023 A1	7/18/2002	Camras et al.					
		US-	2002/0117681 A1	8/29/2002	Weeks et al.					
		US-	2002/0134985 A1	9/26/2002	Chen et al.					
		US-	2002/0179910 A1	12/5/2002	Slater Jr.					
		US-	2003/0038284 A1	2/27/2003	Kurahashi et al.					
		US-	2003/0111667 A1	6/19/2003	Schubert					
		US-	2003/0151357 A1	8/14/2003	Uemura					
		US-	2004/0026709 A1	2/12/2004	Bader et al.					
		US-	2004/0104395 A1	6/3/2004	Hagimoto et al.					
		US-	2004/0130037 A1	7/8/2004	Mishra et al.					
		US-	2005/0014303 A1	1/20/2005	Tsai et al.					
		US-	2005/0026399 A1	2/3/2005	Chien et al.					
		US-	2005/0035354 A1	2/17/2005	Lin et al.					
		US-	2005/0082555 A1	4/21/2005	Chien et al.					
		US-	2005/0087884 A1	4/28/2005	Stokes et al.					

5

	FOREIGN PATENT DOCUMENTS										
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6					
		SG 200401424-7	3/15/2004	Tinggi Technologies Private Limited							
		SG 200401964-2	4/7/2004	Tinggi Technologies Private Limited							
		SG 200506301-1	9/29/2005	Tinggi Technologies Private Limited							
		SG 200506897-8	10/19/2005	Tinggi Technologies Private Limited							
		SG 200508210-2	12/20/2005	Tinggi Technologies Private Limited							
		SG 200605500-8	8/16/2006	Tinggi Technologies Private Limited							
		SG 200606050-3	9/4/2006	Tinggi Technologies Private Limited							
		TW 475276 B	2/1/2002	Ind. Tech. Res. Inst.		*					
		WO 2001/047039 A1	6/28/2001	Lumileds Lighting, U.S., LLC							
		WO 2004/102686 A1	11/25/2004	Cree, Inc.							

* only Abstract in English

Examiner	Date Considered	
Signature		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if passible. ⁶Applicant is to please a check mark bars if English language trapplation is attached.

possible. Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

3

Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

Complete	if Known
Application Number	10/572,525
Filing Date	October 26, 2007
First Named Inventor:	Xuejun Kang
Art Unit	2823
Examiner Name	Nguyen, Khiem D.
Attorney Docket Number	7989P002

	U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No. [†]	Numb	Document Number per-Kind Code ² (If known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
		US-	2005/0093002 A1	5/5/2005	Tsai et al.				
		US-	2005/0127397 A1	6/16/2005	Borges et al.				
		US-	2005/0164482 A1	7/28/2005	Saxlar				
		US-	2006/0124939 A1	6/15/2006	Lee et al.				
		US-	2006/0163586 A1	7/27/2006	Denbaars et al.				
		US-	2006/0186418 A1	8/24/2006	Edmond et al.				
		US-	2007/0029541 A1	2/8/2007	Xin et al.				
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							

5

Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns,	Т
Initials*	No. ¹	Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Lines, Where Relevant Passages or Relevant Figures Appear	
		WO 2005/064666 A1	7/14/2005	Regents of the University of California		
		WO 2005/088743 A1	9/22/2005	Tinggi Technologies Private Limited		
		WO 2005/029572 A1	3/31/2005	Tinggi Technologies Private Limited		
		WO 2005/098974 A1	10/20/2005	Tinggi Technologies Private Limited		
		WO 2007/037762 A1	5/4/2007	Tinggi Technologies Private Limited		
		WO 2007/046773 A1	4/26/2007	Tinggi Technologies Private Limited		
		WO 2007/073354 A1	6/28/2007	Tinggi Technologies Private Limited		
		WO 2008/020819 A1	2/21/2008	Tinggi Technologies Private Limited		
		WO 2008/030188 A1	3/15/2008	Tinggi Technologies Private Limited		

Examiner	Date Considered	
Signature		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 'Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known					
Application Number	10/572,525				
Filing Date	October 26, 2007				
First Named Inventor:	Xuejun Kang				
Art Unit	2823				
Examiner Name	Nguyen, Khiem D.				
Attorney Docket Number	7989P002				

Sheet	4		of	5		Attorney Docket Number	t Number 7989P002		
NON PATENT LITERATURE DOCUMENTS									
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published							
		ZHIFANG FAN, et al., "Very Low Resistance Multilayer Ohmic Contact to <i>n</i> -GaN," Applied Physics Letters, Volume 68, Issue 12, pgs. 1672-1674, (March 18, 1996).							
		I. SCHNITZER, et al., "30% External Quantum Efficiency from Surface Textured, Thin-Film Light-Emitting Diodes," Applied Physics Letters, Volume 63, Issue 16, pgs. 2174-2176, (October 18, 1993).							
		SHYI-MING PAN, et al., "Improvement of InGaN-GaN Light-Emitting Diodies with Surface-Textured Indium-Tin-Oxide Transparent Ohmic Contacts," IEEE Photonics Technology Letters, Volume 15, Issue 5, pgs. 649-651, (May 2003).							
		CHUL HUH, et al., "Improved Light-Output and Electrical Performance of InGaN-Based Light-Emitting Diode by Microroughening of the <i>p</i> -GaN Surface," Journal of Applied Physics, Volume 93, Issue 11, pgs. 9383-9385, (June 1, 2003).							
		F.A. KISH, et al., "Very High-Efficiency Semiconductor Wafer-Bonded Transparent-Substrate (Al _x Ga _{1-x}) _{0.5} In _{0.5} P/GaP Light-Emitting Diodes," Applied Physics Letters, Volume 64, Issue 21, pgs. 2839-2841, (May 23, 1994).							
		R.H. HORNG, et al., "AlGalnP Light-Emitting Diodes with Mirror Substrates Fabricated by Wafer Bonding," Applied Physics Letters, Volume 75, Issue 20, pgs. 3054-3056, (November 15, 1999).							
		H. SUGAWARA, et al., "Characteristics of a Distributed Bragg Reflector for the Visible-Light Spectral Region using InGaAIP and GaAs: Comparison of Transparent- and Loss- Type Structures," Journal of Applied Physics, Volume 74, Issue 5, pgs. 3189-3193, (September 1, 1993).							
		PCT International Search Report for PCT Application No. PCT/SG2003/000222 containing Communication relating to the Results of the Partial International Search Report, 3 pgs., (December 9, 2003).							
		PCT International Search Report for PCT Application No. PCT/SG2005/000061 containing Communication relating to the Results of the Partial International Search Report, 2 pgs., (May 12, 2005).							
		PCT International Search Report for PCT Application No. PCT/SG2005/000062 containing Communication relating to the Results of the Partial International Search Report, 2 pgs., (May 12, 2005).							
		PCT International Search Report for PCT Application No. PCT/SG2006/000254 containing Communication relating to the Results of the Partial International Search Report, 4 pgs., (November 16, 2006).							

Examiner	Date	
Signature	Considered	

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Substitute for Form 1449/PTO			Complete if Known								
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		IDE	Application Nu								
		UNE	Filing Date		October 26, 2007						
		ANT	First Named In	ventor:	Xuejun Kang						
(use as many sheets as necessary)				Art Unit		2823					
						Examiner Nam	е	Nguyen, Khiem D.			
Sheet	5		of		5	Attorney Docke	et Number	7989P002			
				NON P	ATENT LIT	TERATURE DO	CUMENTS				
Examiner Initials*	Cite No ¹						T ²				
		PCT International Search Report for PCT Application No. PCT/SG2006/000255 containing Communication relating to the Results of the Partial International Search Report, 3 pgs., (November 6, 2006).									
			PCT International Search Report for PCT Application No. PCT/SG2006/000395 containing Communication relating to the Results of the Partial International Search Report, 3 pgs., (February 26, 2007).								
			PCT International Search Report for PCT Application No. PCT/SG2007/000261 containing Communication relating to the Results of the Partial International Search Report, 3 pgs., (October 12, 2007).								
		PCT International Search Report for PCT Application No. PCT/SG2007/000288 containing Communication relating to the Results of the Partial International Search Report, 3 pgs., (November 9, 2007).									

Examiner	Date	
Signature	Considered	

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.